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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/569,029

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Luigi Ravarini

2671US

9147

30/996

7590

11/10/2008

ROBERT W. BECKER & ASSOCIATES

707 HIGHWAY 333

SUITE B

TIJERAS, NM 87059-7507

EXAMINER

EVANS, GEOFFREY S

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

11/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/569,029

**Applicant(s)**

RAVARINI, LUIGI

**Examiner**

Geoffrey S. Evans

**Art Unit**

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date 20060327
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

### DETAILED ACTION

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-12 are rejected under 35 U.S.C. 101 because they are hybrid claims with both apparatus and method limitations. It is unclear whether claims 10-12 include all of the apparatus limitations of claim 7.

2. Claims 7-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claim 7 there is no support in the original specification for the manner of preventing the vertical rods from being heated. Since the vertical rods support the heating element there must be at least some heating by thermal conduction. Respectfully suggest deleting in claim 7 on line 7 the phrase "wherein said vertical rods are adapted to be unheated" to obviate this rejection.

3. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 7 it is unclear how the second thermal sensor interacts with the first thermal sensor and the heating element composed of armored resistors.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7,8,10 ,11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skonberg in U.S. Patent No. 3,282,469 in view of Wilson in U.S. Patent No. 7,211,770 and Harris in U.S. Patent No. 2,560,795. Skonberg has an apparatus for heating and melting solid lubricants in a drum(element 11) comprising a heating element composed of a resistor (36) that is embedded and hence considered "armored", a hoist (elements 13,14,16,17,18,22) adapted to raise and lower the heating element into and out of a drum (element 11), a transfer pump (element 26), a bottom inlet (element 27) and a delivery tube (element 28) coupled to the outlet side of the pump. The structure used by Skonberg to hoist the heating element is considered to be functionally equivalent to using vertical rods to raise and lower the heating element in and out of the drum. Wilson teaches using heating elements made of concentric rings (see column 8, lines 23-26, this embodiment is not shown in the drawings), the heating elements requiring junctions to supply power to the resistors and using two temperature sensors, one to cut power when the heat transfer from the workpiece reaches a predetermined level and a safety back up thermostat (see column 8, lines 43-50). The determination of the proper placement of the temperature sensors is within the level of skill in the art in the absence of evidence of unexpected results. Harris teaches using a valve (element 43) to control the flow of lubrication (see column 3, lines 25-30). It would have been obvious to adapt Skonberg in view of Wilson and Harris to provide concentric rings as the shape of the heating element as a matter of common sense to efficient heat

solid lubricant in a drum, to use a first thermostat to melt the lubricant and a second thermostat as a safety thermostat to prevent overheating of the lubricant and to provide a valve to control the output of the lubricant from the drum. Regarding claim 8, the apparatus for moving the heating element (vertical rods, components of the hoist, transfer pump and suction tube) effect the force of gravity on the heating element. Regarding claims 10-11, the first thermal sensor controls the melting of the lubricant and the second thermal sensor prevents it from being excessively heated. Regarding claim 12, the placement of the thermal sensors is considered to be merely a matter of optimization and well within the level of ordinary skill in the art in the absence of evidence of unexpected results.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skonberg in view of Wilson and Harris as applied to claim 7 above, and further in view of Sedran in U.S. Patent No. 4,534,493. Sedran teaches flowing a diathermic fluid (hot oil) to raise the temperature of a solid. It would have been obvious to adapt Skonberg in view of Wilson, Harris and Sedran to provide this to provide heating of the delivery tube with the flowing fluid to prevent resolidification of the lubricant.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Onken in U.S. Patent No. 6,157,776 discloses in column 3, lines 44-47 a thermostat preventing overheating of grease. Ariofo in European Patent No. 140,844 discloses using a pair of thermal sensors to control heating of a lubricant in an internal combustion engine. Frates in U.S. Patent No. 6,046,437 discloses an apparatus for liquefying material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S. Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey S Evans/

Primary Examiner, Art Unit 3742